

Environmentally Friendly Scintillation Fluid

As technology advances, a number of new less hazardous and environmentally friendly scintillation cocktails have been introduced. EHE strongly recommends switching from hazardous scintillation cocktails to newer less hazardous environmentally friendly scintillation cocktails. Many times the environmentally friendly scintillation cocktails are safer to handle. When feasible both economically and scientifically, the hazardous scintillation cocktails should be substituted. Besides being safer to use, disposal of these substitutes is often less expensive.

Most scintillation cocktails are hazardous waste because they are flammable (flash point less than 140°F) or contain EPA-listed solvents such as toluene or xylene. "Environmentally friendly" scintillation cocktails are those that:

- Have a flash point greater than 140°F (60°C).
- Contain solvents such as linear alkylbenzenes (LAB), phenylxylylethane (PXE) or diisopropylnaphthalene (DIPN).

The warehouse has recently started stocking environmentally friendly Ecoscint A (SPWH-68101028) for aqueous samples, and Ecoscint O (SPWH-68101034) for non-aqueous samples. Most vendors also offer environmentally friendly scintillation fluids. A partial list of non-hazardous environmentally friendly scintillation cocktails is below.

Many vendors will send samples and provide information for your evaluation.

Cocktail Name

Ecoscint A
Ecoscint
Ecoscint H
Ecoscint O
Betamax ES****
Cytoscint ES****
Ecolite
Ecolume
Bio-Safe II
Bio-Safe NA
Econosafe
Mono Flow 5
Optifluor

Supplier

National Diagnostics
National Diagnostics
National Diagnostics
National Diagnostics
ICN Biomedicals
ICN Biomedicals
ICN Biomedicals
ICN Biomedicals
Research Products
Research Products
Research Products
National Diagnostics
Packard

Microscint 20
Microscint PS
Ultima Gold
OrganicSolv 3
Envirosafe
Betaplate Scint
Ready Safe

Packard
Packard
Packard
Anorac Scientific
Anorac Scientific
Pharmacia LKB
Beckman Instruments

EHS will continue to handle disposal for all waste scintillation cocktails. **DO NOT** pour any liquid scintillation fluids into laboratory drains.

Please contact EHS on x5718 or x1384 if you have any questions concerning liquid scintillation cocktails.

****The “Environmentally friendly” products are Betamax ES, product number 880020, and Cytoscint ES, product number 882453.****